



# STATE BOARD OF EQUALIZATION STAFF LEGISLATIVE BILL ANALYSIS

Date Amended: **07/20/07**

Bill No: **[SB 98](#)**

Tax: **Sales Taxes**

Author: **Committee on  
Budget and Fiscal  
Review**

Related Bills: **AB 846 (Blakeslee)**

## BILL SUMMARY

This bill makes various statutory changes necessary to implement the Budget. Several of this bill's provisions relate to the Board of Equalization (Board). Specifically, this bill:

- Provides a sales and use tax exemption for low-sulfur fuel products sold to water common carriers and used in either the vessel's auxiliary or main engine, under specified conditions.
- Exempts from sales and use tax those gross receipts in excess of specified amounts per gallon on the sale or purchase of fuel and petroleum products to an air common carrier on a domestic flight, as specified.

## ANALYSIS

### **Low-sulfur Marine Fuels – Auxiliary and Main Engine** *Revenue and Taxation Code Section 6357.7 & 6357.8*

#### **CURRENT LAW**

Under current Section 6385 of the Sales and Use Tax Law, sales of fuel and petroleum products, including low-sulfur fuel products, to water common carriers, for immediate shipment outside this state, are exempt from tax when used in the conduct of the common carrier's activities after the first out-of-state destination. The exemption for fuel purchased by qualified waterborne vessels is dependent upon the amount of fuel on board the vessel prior to refueling. If the quantity of fuel on board the vessel on arrival at the California port is sufficient to enable the vessel to reach its first out-of-state destination, then the fuel loaded at the California port is entirely exempt from tax. However, if the quantity of fuel needed on the voyage from the California port to the first out-of-state destination and the amount used while in port exceeded the quantity of fuel on board the vessel on arrival at the California port, the amount of that excess is subject to tax.

#### **PROPOSED LAW**

**Auxiliary engines.** This bill would add Section 6357.7 to the Sales and Use Tax Law to exempt from the sales and use tax the sale of low-sulfur fuel products to a water common carrier for use in a vessel's auxiliary engine for immediate consumption in the conduct of its business as a water common carrier operating in California territorial or internal waters. This section would provide the following definitions:

- "Low-sulfur fuel products" means any fuel, including heavy fuel oil (HFO), marine distillate fuels, marine gas oil (MGO), marine diesel oil (MDO), or any other diesel fuel with a sulfur content no greater than 0.05 percent or 500 parts per million.

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- “Auxiliary engine” is an engine, on a vessel, that provides power for use other than propulsion.
- “Immediate consumption” means that the delivery of the low-sulfur fuel products for use in a vessel’s auxiliary engine by the seller is directly into a vessel for consumption by that vessel while in California territorial or internal waters, and is not used for storage by the purchaser or any third party.
- “Territorial or internal waters” means waters within a seaward boundary three geographical miles into the Pacific Ocean measured from the mean low-water mark of the California coast, all interior navigable waterways, and the Monterey Bay, subject to definitions of the United Nations Convention on the Law of the Sea.

**Main engines.** In addition, this bill would add Section 6357.8 to provide a sales and use tax exemption for sales of “low-sulfur fuel products for use in a vessel’s main engine” to a water common carrier for immediate consumption in the conduct of its business as a water common carrier until the lesser of the first out-of-state destination or 500 nautical miles beyond California’s territorial waters. This section would provide the following definitions:

- “Low-sulfur fuel products” means any fuel, including HFO, marine distillate fuels, MGO, MDO, or any other diesel fuel with a sulfur content no greater than 1.5 percent or 15,000 ppm.
- “Main engine” is any propulsion engine, including, but not limited to, an engine whose main purpose is to provide power for propulsion, regardless of other uses, including a diesel-electric engine.
- “Immediate consumption” means that the delivery of the low-sulfur fuel products for use in a vessel’s main engine by the seller is directly into a vessel for consumption by that vessel alone until the first out-of-state destination or 500 miles beyond California’s territorial waters and not used for storage by the purchaser or any third party.
- “Territorial waters” means waters within a seaward boundary three geographical miles into the Pacific Ocean measured from the mean low-water mark of the California coast, and the Monterey Bay, subject to definitions of the United Nations Convention on the Law of the Sea.

**Recordkeeping.** Both Sections 6357.7 and 6357.8 would require a water common carrier claiming an exemption to maintain and make available records related to the consumption of low-sulfur fuel, including, but not limited to, the following: (1) a description of the type of low-sulfur fuel used in either the auxiliary or main engine; (2) a description of the use of that low-sulfur fuel; (3) a description of the type of vessel that used the low-sulfur fuel, whether mono-fueled or dual fueled, and the number of auxiliary or main engines used; and (4) a description of the location and destination of the vessel that consumed the low-sulfur fuel while in California’s territorial or internal waters.

**Repeal provisions.** Section 6357.7 would be repealed June 30, 2013, and the Legislative Analysts Office (LAO), in consultation with the Board and other affected state agencies, would be required to prepare and submit a report to the Legislature by January 1, 2012, on the economic and health impact the exempt sales of low-sulfur fuel

products used in a vessel's auxiliary engine have had on California, as well as recommendations on whether the exemptions should be continued or modified.

Section 6357.8 has a similar reporting requirement for the LAO, except the repeal date would be the earlier of the following:

- Six months from the date the Board submits a finding to the Legislature and the Office of Administrative Law that the U.S. EPA has established a Sulfur Emission Control Area under the provisions of Annex VI of the International Convention for the Prevention of Pollution from Ships, 1973, as amended at London in February 1978, or
- Six months from the date the Board submits a finding to the Legislature and the Office of Administrative Law, that the U.S. EPA has established vessel air emissions standards consistent with any amendments made by the International Maritime Organization to Annex VI of the International Convention for the Prevention of Pollution from Ships after the enactment date of this act, provided that the air quality benefits in California are at least as great as those from a Sulfur Emission Control Area and the standards are not applied exclusively to United States flagged vessels, or
- June 30, 2013.

These sections would go into effect July 1, 2008.

#### **BACKGROUND**

The LAO issued a report in 2002 on the effect of the exemption for sales of fuel and petroleum products to water common carriers, and concluded "On this tax policy basis, we recommend that the Legislature remove the existing sunset for the current partial (sales and use tax) exemption for bunker fuel sales, and make the exemption permanent. This would result in the (sales and use tax) being levied in the future only on the portion of the fuel purchased in California which is consumed between California and the first out-of-state destination. This action would result in treating bunker fuel sales similarly to other export sales and place California ports on par with other U.S. out-of-state ports." The Pacific Merchant Shipping Association (PMSA) sponsored Senate Bill 145 (Perata) during the 2002 Legislative Session to extend the sunset date for the bunker fuel exemption until January 1, 2013. SB 145 passed the Legislature, but was vetoed by the Governor. As a result of the Governor's veto of SB 145, the sales and use tax exemption for sales of bunker fuel sunset as of January 1, 2003.

SB 808 (Ch. 712, Stats. 2003), which was authored by then Senator Karnette and sponsored by the PMSA and the International Long Shore Workers Union, reinstated the sales and use tax exemption for bunker fuel sold to water common carriers. The Legislature found and declared that in addition to the negative economic impact of not having a sales tax exemption, there was also a health impact related to the increased production of petroleum coke, which is an alternative refining product to bunker fuel.

AB 846 (Blakeslee) was introduced this session and would have established the Clean Marine Fuels Tax Incentive Act to provide a sales and use tax exemption almost identical to the low-sulfur marine fuels provisions in this bill. AB 846 was held under submission in Assembly Appropriations.

**COMMENTS**

1. **Purpose.** The purpose of this bill is to provide an incentive for oceangoing vessels to use cleaner marine fuels.
2. **What kind of engines and fuel types does the industry use now?** According to a 2005 California Air Resources Board report<sup>1</sup>, most oceangoing vessels use a single large slow-speed diesel engine for propulsion, and smaller medium-speed auxiliary engines that provide power for non-propulsion uses (i.e. lights, navigation, and other ship-board uses). The main engine primarily uses residual fuels such as HFO, while the auxiliary engine runs on either HFO or marine distillate fuels such as MDO or MGO. Those vessels that use HFO in both their main and auxiliary engines are referred to as mono-fueled (or uni-fueled), while those vessels that use distillate fuels (MDO, MGO) and residual fuels (HFO) are dual-fueled.

As explained in the report, there are two types of fuels used in ocean going vessels, distillate and residual. The distillate fuels, MGO and MDO, are lower in sulfur content than the residual fuel, and as explained by the sponsor, the distillate fuels cost about twice as much. In general, the residual fuel has a higher sulfur content than the distillates and can be blended with a distillate to make an intermediate fuel oil (IFO). The residual fuel is so called because it is a fuel refined only after automobile, truck, and jet fuels have been refined. When demand or costs dictate, the residual fuel is further refined into petroleum coke, which can be used as an alternative energy source in some countries.

3. **Even if all of the information is provided to substantiate the exemption, these provisions still present a new and more complex challenge.** The current sales and use tax exemption for sales of fuel and petroleum products to water common carriers has been administered by the Board, on and off again, for almost twenty years. Although there are certain administrative provisions in this bill that parallel the administrative provisions in current law applicable to the exemption for water common carriers, this bill would present a substantial change to the water common carrier's fuel exemption and the Board's administrative functions. Specifically, the proposed exemptions would add an additional workload and complexity in auditing, appeals, and regulatory functions of the Board. Whereas the Board is currently concerned with the amount of fuel claimed as exempt after the first out-of-state destination, now the Board would be additionally concerned with the vessel's engines, fuel type, fuel tanks, and sailing schedules. The more conditions for the exemption, the more complex it becomes. It should be noted however, that currently, low-sulfur fuel is generally not being used by the industry, and the immediate impact to the Board would be minimal.

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<sup>1</sup> State of California, Air Resources Board. "STAFF REPORT: INITIAL STATEMENT OF REASONS FOR PROPOSED RULEMAKING; PROPOSED REGULATION FOR AUXILIARY DIESEL ENGINES AND DIESEL-ELECTRIC ENGINES OPERATED ON OCEAN-GOING VESSELS WITHIN CALIFORNIA WATERS AND 24 NAUTICAL MILES OF THE CALIFORNIA BASELINE." October 2005.  
<http://www.arb.ca.gov/regact/marine2005/isor.pdf>

4. **With the current exemption and the exemptions in this bill, what purchases of fuel and petroleum products would continue to remain taxable?** The current exemption applies to the sales of fuel and petroleum products, including low-sulfur fuel, to a water common carrier for immediate shipment outside this state for consumption in the conduct of its business as a common carrier after the first out-of-state destination. In general, proposed Sections 6357.7 and 6357.8 both intend to provide an exemption for the immediate consumption of low-sulfur fuel products used by the water common carrier while in California waters or the lesser of 500 nautical miles or until the first out-of-state destination. Both the current exemption for fuel purchased by qualified waterborne vessels and the exemptions proposed in this bill are dependent upon the amount of fuel on board the vessel prior to refueling. So, if the quantity of fuel on board the vessel on arrival at the California port is sufficient to enable the vessel to conduct its business in California waters and reach its first out-of-state destination or 500 nautical miles beyond California waters, then the fuel loaded at the California port would be entirely exempt from tax.

Assuming there would be no fuel on board a vessel coming into a California port, and assuming a water common carrier loaded residual and low-sulfur fuel at a California port, and that the water common carrier claimed an appropriate fuel exemption, then the amount of fuel that would be subject to tax would generally be determined by the following conditions:

- Quantity of low-sulfur fuel consumed in a vessel's auxiliary engine outside California's internal or territorial waters.
  - Quantity of low-sulfur fuel consumed in a vessel's main engine after 500 nautical miles outside of California's territorial waters, if the first out-of-state destination is beyond the 500 nautical miles.
  - Quantity of residual fuel consumed up to the first out-of-state destination.
5. **Technical amendment.** The repeal date for the current sales tax exemption for fuel products sold to water common carriers (Section 6385) is January 1, 2014. Keeping the repeal dates consistent would allow the Legislature to decide which of the three exemptions would be extended or allowed to end. This would allow the Board to notify affected parties about changes at one time and could also prevent "gaps" in the exemption periods. For these reasons the repeal dates specified in Sections 6357.7 and 6357.8 should be changed from June 30, 2013 to January 1, 2014.

The current recordkeeping provisions in Section 6357.8 incorrectly refer to auxiliary engines. These should be amended so that they are consistent with the use of the low-sulfur fuel in a main engine. Accordingly, the following language is suggested:

6357.8 (e)(2)(C) A description of the vessel that used the low sulfur fuel product, including the type of vessel, whether the vessel is mono-fueled or dual-fueled, and the ~~number of auxiliary engines~~ type of propulsion system used by the vessel.

(D) A description of the vessel's locations and destinations ~~for the period the vessel was in California's territorial or internal waters until the first out-of-state destination, or 500 nautical miles beyond California's territorial waters.~~

6. **Related legislation.** This bill is similar to Assembly Bill 846 (Blakeslee), which was held in the Assembly Appropriations Committee.

**Air Common Carriers***Revenue and Taxation Code Section 6357.9***CURRENT LAW**

Under existing law, Section 6385 of the Revenue and Taxation Code provides a sales tax exemption for the sale of tangible personal property, *other than fuel and petroleum products*, sold to air, water, and rail common carriers when that property is shipped to a point outside this state under specified conditions. This section additionally provides a sales tax exemption for that portion of the sale of fuel and petroleum products sold to a *water* common carrier that remains on board after the water common carrier reaches its first out-of-state destination

With respect to air common carriers, Revenue and Taxation Code Section 6357.5 provides an exemption for the entire sales price of fuel and petroleum products sold to air common carriers when the fuel and petroleum products are for immediate consumption or shipment in the conduct of the air carrier's business on an international flight. Therefore, if an air common carrier's final destination were France, for example, current law would exempt the entire sale of fuel purchased in California, even if that carrier had stops in Los Angeles and New York before reaching its final destination. On the other hand, if the air carrier's final destination was somewhere in the United States, current law would impose tax on the entire sale of the fuel in California.

In addition to these exemptions, the law (Revenue and Taxation Code Sections 6366 and 6366.1) also contains an exemption for the sale and purchase or lease of aircraft to persons using the aircraft as a common carrier, and component parts of the aircraft as a result of the maintenance, repair, overhaul, or improvement of that aircraft in compliance with Federal Aviation Administration requirements, and any charges made for the labor and services rendered with respect to that maintenance, repair, overhaul, or improvement are exempt from tax.

**PROPOSED LAW**

This bill would add Section 6357.9 to the Sales and Use Tax Law to provide an exemption from July 1, 2008 until July 1, 2013 from the computation of the amount of tax on those gross receipts in excess of a specified amount per gallon from the sale or purchase of fuel and petroleum products by an air common carrier on a domestic flight.

Beginning July 1, 2008, the gross receipts in excess of \$1.93 per gallon derived from the sale would be exempt from tax. The gross receipts proposed to be exempted would increase by \$0.05 each year as shown on the table below if the total amount of fuel and petroleum products to be sold, stored, or otherwise consumed in this state each year, as estimated by the Board, exceeds by 5 percent the total amount of fuel and petroleum products sold, stored, or otherwise consumed in this state during the previous year, as estimated by the Board:

Fiscal Year	Taxable Portion
July 1, 2008 through June 30, 2009	\$1.93
July 1, 2009 through June 30, 2010	\$1.88
July 1, 2010 through June 30, 2011	\$1.83
July 1, 2011 through June 30, 2012	\$1.78
July 1, 2012 through June 30, 2013	\$1.73

This bill defines the term “domestic flight” to mean a flight whose final destination is a point inside of the United States.

This bill provides that the exemption does *not* apply to any tax levied pursuant to Bradley-Burns Uniform Local Sales and Use Tax Law and Transactions and Use Tax Law, unless approved by the local government that would otherwise receive the revenues derived from the taxes imposed under those laws.

This section of the bill would be effective July 1, 2008.

#### **BACKGROUND**

Until July 15, 1991, sales of fuel and petroleum products to air, water, and rail common carriers were exempt from sales tax when used in the conduct of the carriers’ common carrier activities after the first out-of-state destination. The rationale for this exemption was that it made California ports and airports more competitive, and it established consistency in the Sales and Use Tax Law for interstate and foreign commerce sales by exempting that portion of the fuel which was actually transported outside this state prior to any use. However, because of the budget crisis in 1991, this exemption was repealed by AB 2181 (Stats. 1991, Ch. 85) and SB 179 (Stats. 1991, Ch. 88).

In 1992, however, AB 2396 (Ch. 905) restored this exemption for fuel and petroleum products, but only with respect to water common carriers, and only until January 1, 1998. The sponsors of that measure, Pacific Merchant Shipping Association, successfully argued before the Legislature that the July 1991 repeal of the exemption had been directly responsible for a decline in the number of ships which bunker in California ports, and that reinstating the exemption would increase bunker activity in California. The sunset date of January 1, 1998 was extended until January 1, 2003 by AB 366 (Stats. 1997, Ch. 615). Subsequent legislation extended the sunset date to January 1, 2014 (Ch. 712, SB 808, Stats. 2003).

Two bills to restore the exemption for air and rail common carriers were introduced in the 1996 Legislative Session. AB 3375 (Olberg) would have restored the exemption for rail common carriers. AB 566 (Kaloogian) would have restored the exemption for air common carriers. According to a Department of Finance analysis of AB 566, "Governor Wilson has proposed a different form of tax relief for the aircraft industry. Under the Governor's proposal, a sales tax exemption would be extended to property that becomes a component part of an exempt aircraft as a result of maintenance, repair, overhaul, or improvement of the aircraft in compliance with FAA requirements." The Governor's proposal was actually enacted in the 1996 Legislative Session by SB 38 (Lockyer, et al., Stats. 1996, Ch. 954) which, among other things, included the sales tax exemption for the component parts.

Four bills over the last decade have been introduced that would also have exempted from sales tax that portion of the sale of fuel and petroleum products sold to an air common carrier that is left on board after the air common carrier reaches its first out-of-state destination:

- AB 1800 (Machado, 1998) was held in the Assembly Appropriations Committee.
- AB 2470 (Wiggins, 2000) died in Assembly Revenue and Taxation Committee.
- SB 1510 (Knight, 2002) died in Senate Revenue and Taxation Committee.
- SB 998 (Margett, 2005) died in Senate Revenue and Taxation Committee.

Four other bills, similar to this bill, would have exempted from the sales and use tax, those gross receipts in excess of a specified amount per gallon on the sale or purchase of fuel and petroleum products by an air common carrier on a domestic flight:

- SB 359 (Runner & Dutton, 2007) would have, among other things, exempted those gross receipts in excess of \$1.88 per gallon on the sale or purchase of fuel and petroleum products by an air common carrier. This bill was held in the Senate Revenue and Taxation Committee.
- SB 1619 (Dutton, 2006) would have exempted those gross receipts in excess of \$1.131 per gallon on the sale or purchase of fuel and petroleum products by an air common carrier. This bill died in the Senate Revenue and Taxation Committee.
- AB 236 (Bermudez, 2005) would have exempted those gross receipts in excess of \$0.632 per gallon on the sale or purchase of fuel and petroleum products by an air common carrier. This bill died in Assembly Revenue and Taxation Committee.
- AB 2897 (Wiggins, 2002) would have exempted those gross receipts in excess of \$0.50 per gallon on the sale or purchase of fuel and petroleum products by an air common carrier. This bill was held in the Assembly Appropriations Committee.

## COMMENTS

1. **Purpose.** This provision is intended to create an exemption for sales of fuel to commercial air carriers. The state's high tax rate, coupled with the excessive cost of fuel per gallon, is having a dramatic impact on the airline industry's activities in California.



2. **“Air common carrier” should be defined.** The bill does not define “air common carrier.” If the intent is to assist the airline industry, it is suggested that a definition be incorporated in the bill, such as incorporating a reference to Section 23046 of the Business and Professions Code. This section defines “air common carrier” to mean “a person engaged in regularly scheduled air transportation between fixed termini under a certificate of public convenience and necessity issued by the Civil Aeronautics Board, or its successor, or the Public Utilities Commission, or its successor, and ‘airplane’ or ‘common carrier airplane’ means an airplane operated in air transportation by an air common carrier.” This definition is used in terms of the applicability of alcoholic beverage licensing laws to air common carriers selling distilled spirits on board airplanes operating in this State. Without a definition, it is unclear whether the proposed exemption would apply to the airline industry as well as other carriers, such as charter carriers, private carriers, or contract carriers that are engaged in the business of transporting persons or property for hire or compensation.

The Board has defined “air common carrier” for purposes of the sales and use tax exemptions currently applicable to these persons through its Regulation 1621, *Sales to Common Carriers*. This regulation defines common carriers to include carriers such as those in the airline industry, but also other carriers, such as charter carriers, private carriers, or contract carriers, so long as they are engaged in the business of transporting persons or property for hire or compensation and offer these services indiscriminately to the public or some portion of the public. This definition appears to be broader than the intent of this measure. Thus, a definition is recommended in order to clearly describe the carriers the Legislature intends to benefit from this proposed exemption.

3. **The local government option, if exercised, would eliminate the uniform base of local and district taxes.** The bill would allow local governments to opt into the proposed exemption if they vote to do so. If no local governments opted into the proposed exemption, sales of fuel and petroleum products would be exempt at the rate of 6-1/4% (the state rate of 5-1/4%, the 1/2% Local Revenue Fund rate, and the 1/2% Local Public Safety Fund rate).

However, if local governments opt into the exemption, California would be left with a variety of differing rates on sales of fuel and petroleum products. Some practical questions would arise as well. For example, if a city doesn’t opt into the exemption for its Bradley-Burns tax (1/2%), but a county does (3/4%), does the entire Bradley-Burns tax then go to the county within the city limits? That is, would the offsetting city credit disappear?

In addition to the likelihood of increased errors on sales and use tax returns, there would be an added burden placed on the retailers making the sales. The retailers receive no direct economic benefit from the proposed exemption, yet the retailers would be required to 1) program their computers to allow for a separate rate for the fuel sold to air carriers on a domestic flight versus all other fuel and petroleum product sales, 2) obtain and retain necessary documentation to support any exempt sales to qualifying carriers, and 3) account for the exempt sales for purposes of properly reporting their sales and use tax obligations to the Board.

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Also, it is unclear whether “local government” would mean the people of the local jurisdiction voting on the measure or the governing body. Because one provision in the bill states the governing body allowing the exemption shall notify the Board, it would appear that the approval would be by the governing body, and not the local electorate. This should be clarified consistent with the author’s intent.

And finally, it is unclear how the local tax split between multijurisdictional airports (see Rev and Tax Code Section 7204.03) would occur if one jurisdiction opts in, and the other opts out.

4. **Estimating future sales would be problematic.** The bill would require the Board to essentially make a prediction as to whether the total amount of fuel and petroleum products to be sold for an upcoming year would exceed 5 percent of the previous year’s sales, in order to determine what portion of the gross receipts would be subject to tax. It is unclear how the Board would make defensible estimates on what we believe will be sold in the future years. Unpredictable price fluctuations could result in unreliable estimates. Also, in proposed (a)(2) of Section 6357.9, it is unclear whether the estimates for “the total amount of fuel and petroleum products to be sold in this state” include *all* fuel and petroleum sold or consumed in California (including gasoline, oil for cars, etc.) or just the amount sold or consumed by aircraft common carriers. This should be clarified.
5. **Suggested amendment for administering the exemption.** In subdivision (b) of proposed Section 6357.9, the bill should require the air common carrier to, in addition to furnishing the seller with an exemption certificate, state the quantity of fuel and petroleum products claimed as exempt. This is important for administration of the exemption, since the proposed exemption requires that the products be used in the conduct of its business as an air common carrier, and the carrier should certify that portion of the fuel that would be used in an exempt manner.

## **COST ESTIMATE**

A detailed cost estimate is pending. However, some costs would be incurred in revising publications, regulations and the exemption certificate, notifying the affected parties, carrying out compliance and audit activities to ensure proper reporting, and making estimates required by the bill.

## **REVENUE ESTIMATE**

### **BACKGROUND, METHODOLOGY, AND ASSUMPTIONS**

#### **Low Sulfur Fuel**

Auxiliary Engines. In relation to auxiliary engines, low-sulfur fuel products is defined as any fuel, including heavy fuel oil, marine distillate fuels, marine gas oil, marine diesel oil, or any other diesel fuel, with a sulfur content of no greater than 0.05 percent, or 500 parts per million, that is purchased for use in the operation of an engine, on a vessel, that provides power for use other than propulsion. The product would be delivered directly into a vessel for consumption by that vessel while in California’s territorial or internal waters.

Main Engines. In relation to main engines, low-sulfur fuel products is defined as any fuel, including heavy fuel oil, marine distillate fuels, marine gas oil, marine diesel oil, or any other diesel fuel, with a sulfur content of no greater than 1.5 percent, or 15,000

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parts per million, that is purchased for use in the operation of an engine, on a vessel, that provides power for propulsion. The product would be delivered directly into a vessel for consumption by that vessel alone until the first out-of-state destination or 500 miles beyond California's territorial waters, whichever is less.

The Energy Information Administration (EIA) reports fuel sales data for vessel bunkering. In 2005, the following was reported for California:

- |                       |                       |
|-----------------------|-----------------------|
| ▪ Distillate Fuel Oil | 129 million gallons   |
| ▪ Residual Fuel Oil   | 1,412 million gallons |

Distillate fuel generally refers to marine gas oil (MGO) or marine diesel oil (MDO) which is mainly used in auxiliary engines. Residual fuel refers to bunker fuel and is generally used in the main engines. According to The Pacific Merchants Shipping Association (PMSA), an independent not-for-profit shipping association, residual fuel has had a price range of \$300 to \$350 per metric ton, and distillate fuels are priced from \$600 to \$700 per ton. It is also mentioned that bunker price quotes are always on a per metric ton basis, at least for ocean going vessels.

The EIA data is in gallons and the price data provided is in metric ton. PMSA indicated that gallon conversion to metric ton depends on fuel and gravity but generally the conversion will be between 280 and 300 gallons per metric ton.

Distillate fuel, in metric tons is estimated to be 444,828 metric ton (129 million gallons / 290 gallons per metric ton = 444,828 metric ton). If we assume the price to be \$650 per metric ton, sales are estimated to be \$289 million (444,828 metric ton × \$650 per ton = \$289 million)

Residual fuel, in metric tons, is estimated to be 4,868,966 metric ton (1,412 million gallons / 290 gallons per metric ton = 4,868,966 metric ton). If we assume the price to be \$325 per ton, sales are estimated to be \$1.6 billion (4,868,966 metric ton × \$325 price per ton = \$1.6 billion).

Combined sales of distillate and residual fuel oil used on vessel bunkering are estimated to be \$1.9 billion.

In our discussions, PMSA indicated that an estimated ratio of 12% would be an indication of sales prior to the first out of state destination. If we apply this percentage to the \$1.9 billion in sales, \$228 million in residual and distillate sales are estimated to be related to consumption prior to the first out of state destination (12% × \$1.9 billion = \$228 million).

We have no information on what portion of these sales would be replaced by sales of low-sulfur fuel. PSMA indicated that currently no low-sulfur distillate fuel oil is used in vessel bunkering. We have been unable to find any data on the amount of low-sulfur residual fuel oil currently being used in vessel bunkering. It does however, appear that the amount is small.

### **Jet Fuel**

Proposed Section 6357.9 would exempt from the sales and use tax, that portion of jet fuel that exceeds \$1.93 for the period beginning July 1, 2008 through and including June 30, 2013. However, this section would allow this rate to decrease by an increment of \$.05 per year if total consumption of fuel and petroleum products sold, stored, or otherwise consumed in this state, as estimated by the Board, exceeds 5 percent of the

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previous fiscal year's consumption. Therefore the rate for the fiscal year commencing July 1, 2009 could be \$1.88 per gallon; the rate for the fiscal year commencing July 1, 2010 could be \$1.83 per gallon; the rate for the fiscal year commencing July 1, 2011 could be \$1.78 per gallon; and finally the rate for the fiscal year commencing on July 1, 2012 could be \$1.73 per gallon on the sale or purchase of fuel and petroleum products to an air common carrier on a domestic flight.

Over the last five years, jet fuel consumption in California has not significantly varied. According to the U.S. Energy Information Administration, total sales of jet fuel in California for the year 2005 were 3.8 billion gallons. Approximately 10% or 380 million gallons of jet fuel sold in California is for military use. Therefore in 2005, 3.4 billion gallons (3.8 billion gallons – 0.38 billion gallons = 3.42 billion gallons) of jet fuel was used by commercial air carriers. According to the Bureau of Transportation Statistics, total gallonage consumed in the U.S. in 2005 was 19.3 billion gallons. The fuel consumed by international flights accounts for 5.5 billion gallons, which comprises 28 percent (5.5 billion gallons / 19.3 billion gallons) of jet fuel consumed.

Currently, sales of fuel for international flights are exempt from sales and use tax. Assuming that jet fuel usage in California is consistent with the national average, the fuel used for domestic flights is 2.4 billion gallons (3.4 billion gallons x 72 percent = 2.4 billion gallons). As of July 13, 2007, the spot price of jet fuel in Los Angeles was \$2.1979 per gallon. This bill would exempt that portion of the price over \$1.93 per gallon, or \$0.2679 per gallon for a one-year period beginning July 1, 2008. Therefore, the total annual expenditures that qualify under this measure are estimated to be \$643 million (2.4 billion gallons x \$0.2679 per gallon = \$643 billion).

The total annual exempt sales in all five years are calculated as follows:

Fiscal Year	Proposal	CA Price (per gallon)	Exempted Amount	CA Domestic Flights (in gallons)	Total Annual Exempt Sales
2008-09	\$ 1.93	\$ 2.1979	\$ 0.2679	2,400,000,000	\$ 642,960,000
2009-10	1.93	2.4177*	0.4877	2,400,000,000	1,170,480,000
2010-11	1.93	2.6595*	0.7295	2,400,000,000	1,750,800,000
2011-12	1.93	2.9254*	0.9954	2,400,000,000	2,388,960,000
2012-13	1.93	3.2179*	1.2879	2,400,000,000	3,090,960,000

An increase in consumption of 5.1 percent for each fiscal year beginning July 1, 2009 through July 1, 2012 would result in the following:

2009-10	\$ 1.88	\$ 2.4177*	\$ 0.5377	2,522,000,000	\$ 1,356,079,000
2010-11	1.83	2.6595*	0.8295	2,651,000,000	2,199,005,000
2011-12	1.78	2.9254*	1.1454	2,786,000,000	3,191,084,000
2012-13	1.73	3.2179*	1.4879	2,928,000,000	4,356,571,000

\*Jet fuel prices are extremely volatile. This assumes an average of 10% every year.

**Revenue Summary**

**Low Sulfur Fuel.** The immediate revenue impact of this proposal would be small as at the present time very little low-sulfur fuel is being purchased for use in vessel bunkering. However, if 10% of the current taxable purchases of fuel for vessel bunkering were to change to low-sulfur fuel, then the purchases exempted by this proposal would amount to \$22.8 million.

**Revenue Loss**

State loss (5.25%)	\$ 1.2 million
Local loss (2.00%)	0.5 million
Special District loss (1%)*	0.2 million
<b>Total</b>	<b>\$ 1.9 million</b>

\* Nearly all of the bunker fuel is sold in jurisdictions with a tax rate of 8.25%.

**Jet Fuel.** If consumption remains flat, prompting the price exemption threshold to remain at \$1.93 per gallon, assuming an annual increase in price of 10%, the revenue impact from exempting jet fuel sales over the threshold is as follows:

Fiscal Year	Total Annual Exempt Sales	State 5.00%	Fiscal Recovery Fund 0.25%	Local Revenue Fund 0.5%	Public Safety Fund 0.5%	Total
(all values in millions)						
2008-09	\$ 643	\$ 32.0	\$ 1.6	\$ 3.2	\$ 3.2	\$ 40.0
2009-10	1,170	58.5	2.9	5.8	5.8	73.0
2010-11	1,751	87.5	4.4	8.8	8.8	109.5
2011-12	2,389	119.0	6.0	12.0	12.0	149.0
2012-13	3,091	154.5	7.7	15.4	15.4	193.0

An increase in consumption of 5.1 percent for each fiscal year would result in the following:

Fiscal Year	Total Annual Exempt Sales	State 5.00%	Fiscal Recovery Fund 0.25%	Local Revenue Fund 0.5%	Public Safety Fund 0.5%	Total
2009-10	\$ 1,356	\$ 67.8	\$ 3.4	\$ 6.8	\$ 6.8	\$ 84.8
2010-11	2,199	110.0	5.5	11.0	11.0	137.5
2011-12	3,191	159.5	8.0	16.0	16.0	199.5
2012-13	4,357	217.8	10.9	21.8	21.8	272.3

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*This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the Board's formal position.*